Title (en)

FAST TRANSFORM FOR RECONSTRUCTION OF ROTATING-SLAT DATA

Title (de)

SCHNELLTRANSFORMATION FÜR EINEM REKONSTRUKTION VON ROTIERENDE-STEGLOCH DATEN

Title (fr)

TRANSFORMEE RAPIDE POUR RECONSTRUCTION DE DONNEES DE PLAQUES ROTATIVES

Publication

EP 1386289 A2 20040204 (EN)

Application

EP 02725152 A 20020313

Priority

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- US 80893101 A 20010315

Abstract (en)

[origin: WO02075662A2] A nuclear medical imaging apparatus receives an associated object (18). A radiation detector (12) is equipped with a slat collimator (14) including a plurality of spaced apart slats (114) separating individual detecting elements of an essentially linear array of detecting elements (116). The slat collimator produces planar collimation and results in projection data which is weighted inversely with distance in the projection direction. An image reconstruction processor (34) converts the projection data obtained by the detector (12) into an image, including correction for the inverse distance weighting. The image reconstruction processor (34) includes a memory, a preconditioning operator P (36), a projection operator S (38), and an iterative looping operator (40) which applies the preconditioning operator P (36) and the projection operator S (38) to the memory contents to calculate updated memory contents. The iterative loop operator (40) iteratively corrects for the inverse distance dependence of the projection data.

IPC 1-7

G06T 11/00

IPC 8 full level

G01T 1/161 (2006.01); **G06T 1/00** (2006.01); **G06T 17/20** (2006.01)

CPC (source: EP US)

A61B 6/4258 (2013.01 - EP US); **G06T 17/20** (2013.01 - EP US); A61B 6/037 (2013.01 - EP US); Y10S 378/901 (2013.01 - EP US)

Citation (search report)

See references of WO 02075662A2

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